thousands of square miles in America, and that a single Baku oil fountain has actually yielded as much in one day as 25,000 wells in America. The American system has been adopted at Grozni and Maikop. Manila ropes have been very generally replaced by wire ropes. Pumps cannot be used at Baku to raise the oil, and it is therefore baled by steam or electric power; air-lifts have recently been found successful. In default of fresh water, steam at Baku has to be obtained from sea-water. which causes rapid destruction of the boilers.

Oil is conveyed to the Black Town (Baku) refineries in pipe lines, of which in 1906 there were 39 in private ownership besides the State pipe lines. Large firms had their own pumping stations in addition to those provided for general use. Fountain oil was pumped direct to the stations and measured there. Some of the Bibi-Ebyat oil goes by barge.

From Baku the oil has four means of transit: by rail to Batum or Poti; by pipe line (kerosene) to Batum; by rail to Petrovsk; and by tank-steamer to Astrakhan and thence up the Volga. The last route, by which the Volga factories are supplied, is only open from April to October.

Electric power was steadily replacing steam power on the oil-fields in 1914. The Spies Petroleum Co. at Grozni run their works almost wholly by it. There are generating stations at Sabunchi, belonging to Nobel Brothers; at Zabrat, belonging to the Société de la Caspienne et de la Mer Noire; at White Town (1,200 horse-power); and at Baieloff (4,500 horse-power). At Sabunchi and Zabrat the Surachani gas is used to generate electricity.

## (6) Manufactures

Ciscaucasia and Transcaucasia have each their own characteristic industries, which, in the former case, are those proper to a region predominantly agricultural, and in the latter are dependent on the output of the oil-fields.

3: Anonymous U-4 (no date) 1920 RH1 Caucasia PH1



22,000,000 gallons in 1914. Were French methods of manufacture employed more extensively, the industry might be greatly developed. There is an Italian firm at Kislovodsk in Terek which makes Riesling and other wines under modern conditions.

*Distilling* is in part an independent industry and in part a means of utilizing the inferior wines. In 1913 there were 15 distilleries—8 in Kuban, 4 in Terek, 2 in Stavropol, and 1 in Kutais—and the output of alcohol in that year was 8,193,000 gallons, of which more than two-thirds were distilled in Kuban.

*Other industries* of the country may be very briefly enumerated. A *tea* factory has recently been opened at Chavka, and has an annual output of about 55 tons, and other factories are (or were) being built with Government aid at Baku and Ozurgeti. A *beet-sugar* factory, started in 1913 at Gulevichi, was brought to a standstill for want of beetroot in 1914. There are three *saw-mills* at Tiflis; the Italian firm of Sbrajavacca has saw-mills at Socilava and Poti, which turn out 300 cubic metres daily, and Ananov Brothers have small saw-mills in Kutais, driven by electric power. A factory for making *bamboo furniture* was opened at Chavka in 1907. There are nine *brick* and *tile* factories at Baku and four tile factories at Tiflis, while *pottery* works have been opened at Ksauka, Tiflis, by an Italian firm, which also makes tiles. *Soap* is made at Tiflis, and *sulphuric acid* at Baku.

### (7) Power

In 1914 there were ten chief power-stations: near Beli Ugol on the Podkumka river (1,000 horse-power); near Sukhum on the Besletk river (owned by the Sukhum Electric Co.); near Gagri on the Jockvar river (working the climatic station); at Batum (water-driven), supplying Batum with electricity; at Kutais, supplying power for Ananov Brothers' saw-mills; at Sanain (700 horse-power), belonging to the Caucasus Metallurgical Co.; at Katar copper mines (Sangesur

subscribed in London) for the purpose of a new water-supply, drainage, and the construction of an electric station. Only the first of these three works has been carried out. A description of the port of Baku is given above, p. 45.

*Ekaterinodar* is the centre of the increasingly important trade in tobacco. It has an annual fair, at which the value of goods exchanged is said to be about £400,000. There are several refineries, dealing with oil from the Maikop fields. As the town is both an agricultural and an industrial centre, experimental fruit-farms and technical schools have been opened there.

*Tiflis*, the seat of Government, is a fine modern town, with electric light, electric trams, and cold storage facilities. Only in the oriental quarter are there open bazaars. It is the distributing centre for Russian manufactured goods, and also does a large transit trade in Persian exports.

*Vladikavkaz* is the principal town of Ciscaucasia and an important agricultural centre. *Elisavetopol* is a centre for trade in wine, fruit, and cotton; *Erivan* and *Kutais* for trade in wine and fruit. *Stavropol*, *Akhaltsikh*, *Alexandropol*, *Kars*, *Grozni*, *Nukha*, and *Maikop* are all agricultural centres, the last especially for wine, while Nukha, Akhaltsikh, and Alexandropol are particularly concerned with fruit. Grozni and Maikop are also petroleum centres.

The principal centres of industry are *Tiflis*, *Baku*, *Batum*, *Ekaterinodar*, *Shusha*, *Novorossiisk*, and *Chavka*. Batum is declining as an industrial centre, whilst Baku and Ekaterinodar are progressing; both these last-named towns doubled their budgets between 1904 and 1909.

All Transcaucasian towns have their bazaars, and in the less populated and poorer districts monthly fairs take the place of shops.

Batum, Novorossiisk, Poti, and other ports are described above (pp. 42–46).

[see cat. 116 -- Analyst]

361 The largest metropolitan centers are for the most part ancient cities, such as Tbilisi, Kirovabad, Kutaisi and Erevan. Baku arose before the Bolshevik Revolution as the world's best-known oil producer. Under the Soviet regime, industrial cities have grown rapidly in Transcaucasia and a number of new centers have been established. The most important of these recent creations are probably [438] Sumgait near Baku, and Rustavi near Tbilisi, both founded during the Second World War. Sumgait produces steel pipe, alumimum and synthetic rubber, and is due to get a superphosphate plant during the sixth Five-Year Plan. Rustavi has an integrated steel plant and produces cement and nitrate fertilizer.

CD 197

others being Veinakh, Lak-Dargwa, Samurian, Khinalug, and Udi). Avar has the status of a literary language in the Dagestan ASSR. The literary language is based on the Khunzakh dialect which was also the basis of the old "bol mats'" ("army language"), the common Avar lingua franca. Knowledge of Avar is spread well outside its own linguistic territory (Andi-Dido area, Tsakhur area, Archi, W part of Lak and Dargwa areas).

SUBDIVISIONS: There are four major dialects: Khunzakh, Gidatl' -- Andalaly-Karakh, Antsukh, and Char.

CD 231 .438 241

TRADITIONAL ECONOMY: Stockbreeding; home industry (Caucasian felt cloaks, leather goods, wooden objects, metal work, tapestry-weaving, embroidery); horticulture.

CD 795

RELIGION: Islam (Sunni).

7: Columbia U. S-4, 5 1956 RHl Caucasia RH
Dagestan RH 8
Andi

## 10. ANDI

C.
D.
101 NAME: SELF-DESIGNATION: Qwannaw, pl. Qwannal
RUSSIAN DESIGNATIONS: Andii, Andiitsy (this name is also used to include, besides the Andi proper, the other peoples of the Andi group; cf. below under "Language").
OTHER DESIGNATIONS: (Avar:) Handísew, pl. Handál, the country: Handí.

C.
D.
161 NUMBER: 1926 7,840 (Russian census, ethn.)
7,720 (Russian census, ling.)

C.
D.
162 LOCATION: N of the Andiiskoe Koisu, at its bend eastward (auls Andi, Ghunkha, Ghaghatl, Rik'uan, Chankho, Zilo, Muni in rayon Botlikh and auls Kvankhidatl, and Khuset in rayon Vedeno, Dagestan ASSR).

C.
D.
197 LANGUAGE: Andi (Qwannab mits·i) forms with Botlikh, Godoberi, Karata, Bagulal, Tindi, Chamalal, and Akhvakh, the so-called Andi subgroup of the Avaro-Ando-Dido group of the NE Caucasian languages. The language is not written, Avar being used as the literary language.

C.
D.
231
438 TRADITIONAL ECONOMY: Sheep-raising, home industry (Caucasian felt cloaks, tapestries, goldsmithing).

C.
D.
795 RELIGION: Islam (Sunni).

7: Columbia U. S-4,5 1956 RH1 Caucasia RH1, Dagestan RH8

## 16. CHAMALAL

CD 101 NAME: SELF-DESIGNATION: according to separate villages; as opposed to other peoples: Ch'amalaldu, pl. Ch'amalaldube, collective: Ch'amalali.
RUSSIAN DESIGNATION: Chamalaly.

CD 161 NUMBER: 1926 3,438 (Russian census, ethn.)
3,438 (Russian census, ling.)

CD 162 LOCATION: On the E side of the Andiiskoe Koisu, just below the bend; auls Verkhnii Gakvari (with sub-villages), Nizhnii Gakvari (with sub-villages), Agvali, Tsumada, Tsumada-Urukh, Richaganik, Gadyri (with sub-villages), Gachitl′, Gigatl′ (with sub-villages), Kvankhi (Tsumada rayon, Dagestan ASSR).

CD 197 LANGUAGE: Chamalal (Ch'amalaldub mits'·) forms with Andi, Botlikh, Godoberi, Karata, Bagulal, Tindi, and Akhvakh, the Andi subgroup of the Avaro-Ando-Dido group of the NE Caucasian languages. The language is not written, Avar being used as the literary language.

SUBDIVISIONS: Dialects: 1a. Gakvari (incl. Gakvari, Agvali, Tsumada, Tsumada-Urukh, Richaganik); 1b. Gadyri (incl. Gachitl′ ) and Kvankhi; 2. Gigatl′ .

CD 231 438 241 TRADITIONAL ECONOMY: Cattle-breeding; home industry (Caucasian felt cloaks, goldsmithing); agriculture.

CD 795 RELIGION: Islam (Sunni).

7:Columbia U. S-4, 5 1956 RHI ColumbiaRHI
DagestanRH8
Lak

## 24. LAK

C.D. 101 **NAME:** SELF-DESIGNATION: Lak; Lakʻuchū
RUSSIAN DESIGNATIONS: Laki, Kazikumukhtsy.
OTHER DESIGNATIONS: (Avar:) Tumaw, pl. Tumal; Lezgian: Yakholshu

C.D. 161 **NUMBER:** 1926 40,380 (Russian census, ethn.)
40,336 (Russian census, ling.)
1955 well over 55,000 (estimate, Zhirkov).

C.D. 162 **LOCATION:** Basin of the upper Tleuserakh, Khatar, and Kazikumukhskoe Koisu (rayons Lak and Kula, separate villages in rayons Tsudakhar, Akusha, Rutul, Kurakh, Charoda, and Dakhadaev). Since 1944 also in the valley of Yaryksu river (Novo-Lak rayon, Dagestan ASSR).

C.D. 197 **LANGUAGE:** Lak (lakʻu maz) forms with the Dargwa group of languages the Lak-Dargwa subdivision of the NE Caucasian languages, which include also Veinakh, Avaro-Ando-Dido, Samurian, Khinalug, and Udi. Lak has the status of a literary language in the Dagestan ASSR; the written language is based on the Kumukh dialect.

C.D. 231 241 ●438 **TRADITIONAL ECONOMY:** Cattle-breeding; production of leather goods and pottery; metal-work (weapons); agriculture.

C.D. 795 **RELIGION:** Islam (Sunni).

7: Columbia U. S-4.5 1956 RHI Caucasia RH1
Dagestan RH8
Dargin

C.D. 197 SUBDIVISIONS: Dialects: Akusha-(or Akkhusha-)Urakha and Tsudakhar, both with many sub-dialects.

C.S. 241 438 TRADITIONAL ECONOMY: Agriculture, home industry (pottery, leather work, tapestry-weaving, weapon-and tool-making).

C.E. 795 RELIGION: Islam (Sunni).

7:Columbia U. S-4, 5 1956 RH1 Caucasia RH
Dagestan RH 8
Lezgin

C.
D.
231 TRADITIONAL ECONOMY: Cattle-breeding;
241 agriculture; horticulture; home industry
438 (tapesty-weaving, smith's craft).

C.
D.
795 RELIGION: Islam (Sunni).

## 29. AGUL

C. D. 101 NAME: SELF-DESIGNATION: Aghul, Aghulshuy
RUSSIAN DESIGNATION: Aguly

C. D. 161 NUMBER: 1926 7,653 (Russian census, ethn.)
7,653 (Russian census, ling.)

C. D. 162 LOCATION: Basin of upper Kurakh-chai and Gyulgeri-chai (Magudere), with affluents (rayons Agul and Kurakh, Dagestan ASSR).

C. D. 197 LANGUAGE: Agul (Aghul ch'al, Aghularin ch'al) forms with Lezgian, Rutul, Tsakhur, Tabasaran, Budukh, and Dzhek, the Samurian subdivision of the NE Caucasian language group. The language is not written, Lezgian being used as the literary language.

SUBDIVISIONS: Two dialects: Agul proper and Koshan.

C. D. 231 438 TRADITIONAL ECONOMY: Cattle breeding; home industry (production of cloth, tapestries, felt cloaks).

C. D. 795 RELIGION: Islam (Sunni).

## 30. RUTUL

C. D. 101 NAME: SELF-DESIGNATION: no general one; the inhabitants of the aul Rutul (Mykhád) call themselves Mykhášhura.
RUSSIAN DESIGNATION: Rutuly, Rutul'tsy.

C. D. 161 NUMBER: 1926 10,495 (Russian census, ethn.)
10,356 (Russian census, ling.)

C. D. 162 LOCATION: Area of confluence of Samur and Kara-Samur (18 villages) (Rutul rayon; vill. Khnov in Akhty rayon (Dagestan ASSR); Shin and Kainar in Nukha rayon, Azerbaidzhan SSR).

C. D. 197 LANGUAGE: Rutul (Mykhánidy ch'äl) forms with Lezghian, Agul, Tsakhur, Tabasaran, Budukh, and Dzhek, the Samurian subdivision of the NE Caucasian language-group. The language is not written, Lezgian being used as the literary language.

C. D. 231 438 TRADITIONAL ECONOMY: Cattle-breeding; home industry (production of cloth, tapestries, felt cloaks).

C. D. 795 RELIGION: Islam (Sunni).

## 31. TSAKHUR

C. D. 101 NAME: SELF-DESIGNATION: No general one; inhabitants of aul Tsakhur (Ts'akhur) call themselves Ts'akhighali, pl. Ts'akhby.
RUSSIAN DESIGNATION: Tsakhury.

C. D. 161 NUMBER: 1926 19,085 (Russian census, ethn.)
10,951 (Russian census, ling.)

C. D. 162 LOCATION: Samur basin W of its confluence with the Kara-Samur (Tsakhur rayon, Dagestan ASSR); also on the S slopes of the Caucasus in the area of Elisu (Azerbaidzhan SSR).

C. D. 197 LANGUAGE: Tsakhur (Ts'akhbishda miz) forms with Lezgian, Agul, Rutul, Tabasaran, Budukh, and Dzhek, the Samurian subdivision of the NE Caucasian language-group. The language is not written, Avar being used as the literary language in the Daghestan ASSR, Azeri in the Azerbaidzhan SSR.

C. D. 231 438 TRADITIONAL ECONOMY: Cattle-breeding; home industry (production of cloth, tapestries, felt cloaks).

C. D. 795 RELIGION: Islam (Sunni).

7: Columbia U. S-4, 5 1956 RHI Caucasia RHI
Dagestan RH8

## 32. TABASARAN

C.D. 101 NAME: SELF-DESIGNATION: Tabasaran zhvi, Tabarasan zhvi, Ghumghum zhvi.
RUSSIAN DESIGNATION: Tabasarantsy.

C.D. 161 NUMBER: 1926 31,983 (Russian census, ethn.)
29,726 (Russian census, ling.)

C.D. 162 LOCATION: Basin of Upper Rubas-chai and Upper Chirakh-chai (rayons Tabasaran and Khiv, Dagestan ASSR).

C.D. 197 LANGUAGE: Tabasaran (Tabasaran ch'al) forms with Lezgian, Agul, Rutul, Tsakhur, Budukh, and Dzhek, the Samurian subdivision of the NE Caucasian language-group. It has the status of a literary language in the Daghestan ASSR; the written language is based on the southern dialect.

SUBDIVISIONS: The language has two main dialects: North (Khanag) and South Tabasaran.

C.D. 241 438 TRADITIONAL ECONOMY: Agriculture; horticulture; home industry (weapon- and tool-making, silversmith's and coppersmith's work, tapestry-weaving).

C.D. 495 RELIGION: Islam (Sunni).

7: Columbia U. S-4, 5 1956 RHI Caucasia RHI
Armenia

197 LANGUAGE: Armenian (Hai lezu) constitutes a separate branch of the Indoeuropean language family. The language has an old literary tradition going back to the 5th century A. D., and a script of its own. This literary language is based on the dialect of Ararat; there is now also a literary tradition for the Western dialect-group.

SUBDIVISIONS: The Armenian dialects are subdivided into an Eastern (Ararat, Karabakh, etc.) and a Western (Erzurum, Hemshin, Istanbul, etc.) group, to which Adjarian adds a third branch including the dialects of Maragha, Khoy, and Artvin.

241
231
438 TRADITIONAL ECONOMY: Agriculture; viniculture; in the mountains: cattle-breeding; commerce and art crafts.

795 RELIGION: Armenian-Gregorian; there are a Roman Catholic (Uniate) and a Protestant minority. The Khemshin (Hemshin, Hemshili) on the Black Sea coast near the Turkish border (629 in 1926, Russian census) are Muslim.

197 belong Persian and, in the Caucasus, Ossetian and Kurdish.

SUBDIVISIONS: Two main dialects, that of the Muslim and that of the Jewish Tat, the former divided into a number of sub-dialects.

24 TRADITIONAL ECONOMY: Agriculture;
• 438 horticulture; home crafts (tapestry-weaving, metal-work).

795 RELIGION: Part Muslim (Sunni), part Jewish.

7:Columbia U. S-4, 5 1956 RHl CaucasiaRHl

162 LOCATION: Geographical: Transcaucasia, Northern Caucasus along the Caspian Sea (northward as far as Derbent), northwestern Persia, southern Kurdistan (Iraq).

Political-Administrative: USSR: Azerbaidzhan SSR, Georgian SSR, Dagestan ASSR. Persia: Rizaiyeh, Azerbaijan, Khamseh, Kazvin, Ardelan provinces. Iraq: Erbil, Kirkuk, Sülaimaniya provinces.

197 LANGUAGE: Azeri Turkic; belongs to the Western Oghuz Turkic group and differs very little from Turkish and the Kashkay-Hamse languages; literary language since the 14th century; lingua franca in Transcaucasia, Dagestan ASSR, and northern Persia.

SUBDIVISIONS: Tribal: Settled Azeris; Nomadic Azeris (Iliyat). Dialectal: Northern (USSR); Southern (Persia).

244 231 438 TRADITIONAL ECONOMY: Agriculture; cattle-breeding; commerce; industry.

795 RELIGION: Islam (Shii, Sunni).

C. G. 231 241 beauty and stamina. Apiculture is also widespread among the Circassians; their beehives, contrary to those of the Georgians and Abkhaz, are similar to those found in Central Europe; they are made of bast or of plaited willow-twigs which are covered with clay or cow-dung.

C. D. 233 In Dagestan, stock-raising is preponderant (sheep, goats, cows, horses, donkeys, buffaloes). In winter, the herds are usually brought to the steppe-country in the South or to the Caspian coast area. C. D. 241 The southeast, i.e. the country of the Lezghi, is comparatively better suited for agriculture, but it is practiced even in the more elevated regions. Wheat, barley and millet are grown in small fields, situated on natural or artificial terraces, which often require artificial irrigation. C D [40] The ground is cultivated with a local kind of light plough called durats, puruts, etc. which only scrapes the soil superficially. As most of the fields require manuring, the constant removing of stones, and even restoring of the soil, which has to be carried up by hand, farming involves hard labor. C. D. 438 As the production of grain has never covered the needs of the population, home-industry is highly developed in Dagestan. C. D. [286] Everywhere the women do their own spinning and weaving. The spinning wheel is unknown; the looms for carpet-weaving differ from those for the weaving of coarse cloth out of homespun wool and of hemp-cloth used for sacks. Many crafts are practiced beyond the

C. D. 438 [287] Many crafts are practiced beyond the requirements of the household for interchange and even export, e. g. the production of black felt for the customary cloaks and of white felt for a local sort of foot-gear, of leather straps and belts, boots and saddles. Usually, a whole village specializes in a certain craft; at the end of the working season the products are loaded on horses, and a caravan of fifty or more men sets out into the plains to barter their goods for corn. Pottery making is practiced C. D. [323] mainly in the villages of Balkhar and Sulevkent; some villages specialize in blacksmithing, C. D. [324] others in the production of grave-plates and tombstones with chiselled ornaments and inscriptions. The village of Kubachi is renowned C. D. [326] far beyond Dagestan for its highly artistic metalwork (bronze founding and many kinds of inlay-work) which is based on ancient traditions.

631
178 Azerbaijan, for instance, is handled as a whole. The stock is driven from the winter pastures of Azerbaijan (used as a cotton growing area during the summer) and spends the summer months in Armenia. In the field of industry the Baku oilfields and oil industry are connected through pipelines with the oil industry of Batumi, in Georgia. Similarly, the Rustavi steel mills of the Georgian SSR depend on the iron ore of Dashkesan which is in Azerbaijan.

178
438 Industrialization in agriculture, stock-raising, and forestry follows the general Soviet patterns. The Kolkhozes and Sovkhozes are predominant, some of them covering large areas like the Gigant (in Rostov Oblast). This centralization makes it easy for the central government to introduce new industrial crops, like tea or various rubber plants, into the South Caucasus, or spread the cultivation of rice or cotton in the North Caucasus. At the same time it presents the opportunity to transform the nomadic features of eastern Caucasian stock-raising into a more sedentary one. In the field of industry proper and related fields, industrialization went ahead with great strides when compared with the 1913 status. In the Czarist period the Caucasus had an oil industry (Baku, Groznyy, Maykop), a mining industry (Chiatura, Sadon and Kedabek), some copper smelters (in Alaverdi and Kafan), and some manufacturing industries (like the food industry in western North Caucasus, the fishing industry

178 along the Caspian coast, the cognac and wine
•438 industry around Yerevan). Soviet industrialization has added the coal mines at Tkvarcheli and Akhaltsikhe (in Georgia), all the thermoelectric and hydroelectric plants, the iron mines at Dashkesan, the molybdenum mines at Kadzharan, and the large centers of heavy metallurgy. The most important centers of ferrous metallurgy are Rustavi, and the ferramanganese works of Zestafoni (both in the Georgian Republic). Similarly the aluminum industry of Yerevan, based on the electric power of the area, is due to Soviet industrialization efforts. Construction of machinery (in the Czarist period mostly at Taganrog and Baku) also got a new impetus. Nowadays almost every city in the Caucasus is equipped with plants producing various kinds of machinery. Armavir, Maykop, Novorossiysk, Taganrog, and especially Rostov, produce agricultural machinery. The Rossel'mash plant in Rostov is the largest one in the USSR. Automobiles are produced in new plants in Kutaisi and Rostov, aircraft in Makhachkala, Rostov, Taganrog; electric locomotives in Novocherkassk. In shipbuilding the changes during the Soviet period have been less striking. Czarist Russia already had a traditional shipbuilding industry. The chemical industry, almost nonexistent in pre-Soviet periods (except around the Lake Baskunchak), has also received a new impetus. Armenia has a whole series of

178
438 chemical centers (Alaverdi, Kirovakan, Amamlu, Leninakan, Yerevan), and Yerevan and Baku are producing synthetic rubber. The textile industry and related fields, except for some silk industry and traditional nomadic rug weaving, were also almost non-existent in the Czarist period. Nowadays, one finds cotton ginning establishments along the Kura and Aras rivers and in or around the cotton growing areas of the North Caucasus (Khasavyurt, Budennovsk, Georgiyevsk, etc.). Cotton mills in Armenia, Azerbaijan, Dagestan, woolen mills along the southern and northern slopes of the Greater Caucasus, and some of the silk filatories and mills were established in recent periods. Textile and clothing mills, almost unknown during the Czarist period, have appeared in such centers as Leninakan. New industries are the large-scale leather, boot, and shoe factories, and the alunite mines at Zaglik, producing the necessary raw material for the tanning trade. Lumbering, sawmilling, woodworking and furniture plants represent also, at least in their present day form, a completely new industry in the Caucasus, as is the paper mill at Zugdidi. In the food industry the results of the Soviet industrialization policy are less striking. The North Caucasus even in the pre-Soviet period had a relatively well-developed food industry. Similarly the salt mines (Baskunchak, Nakhichevan'), producing one of the most important raw

178
438 materials of the food industry, were well exploited under the earlier regime. As a whole, however, one cannot compare the present day variety in food industry with that of Czarist Russia. The giant corn kombinat of Beslan producing starches, molasses, etc. symbolizes the results of the Soviet efforts in this field. The large number of oil presses in the North Caucasus, the sugar refineries in the South Caucasus, the fruit canning centers especially along the slopes of eastern North Caucasus, and the milk industry, centered mostly around the health resorts, were founded in general during the Soviet period. The fishing industry and fish-canning along the Caspian Sea coast and along the shores of the Sea of Azov reached their present size during the recent periods. The wine industry is an old industry in the Caucasus, but the tea industry is a Soviet creation. This new industry is centered in the subtropical western and eastern corners of the South Caucasus.

178
439 Of the related fields, transportation also shows the impact of the new Russian industrialization policy. On the eve of World War I, the Russian railroad system was inadequate. Of the present main lines, only the Baku-Rostov, the Novorossiysk-Tsaritsyn, and the Baku-Batum were in existence. There was also a trunk line connecting Dzhul'fa with Tiflis, and Astrakhan' with Saratov, and Stavropol' with Yekaterinodar. As against this,

23: Shabad N-4 (no date) 1951 R1 Soviet Union R1
Caucasia RH1



The Kuban' steppes are among the chief grain-producing regions the USSR. The fertile black earth and sufficient rainfall favor the extensive cultivation of cereals such as wheat, barley, and corn, while of the industrial crops sunflower, cotton, *kenaf*, soy and castor beans are most important. Rice is grown in the swampy delta of the Kuban' River. In the drier eastern portion of the steppes and in the mountainous section of the Northern Caucasus the raising of livestock and allied activities are the main occupations of the rural population.

The industries are concerned primarily with the extraction and refining of petroleum (Groznyy, Makhachkala, and Maykop), the mining of polymetallic ores and molybdenum, and the production of hydroelectric power. In the steppes rural industries process the local products and produce vegetable oils, alcohol, sugar, and starches. Large cement mills at Novorossiysk are notable. Fishing and canning are well developed along the coast. An important role is played by health and tourist resorts, notably Kislovodsk and its satellites in the foothills of the Caucasus and the subtropical resorts of Sochi and Matsesta along the Black Sea littoral.

Two main rail lines serve the steppes of the region. Tikhoretsk is the junction for these two railways coming from Stalingrad and Rostov. The Stalingrad line passes through Krasnodar and on to the Black Sea port of Novorossiysk, while the Rostov trunk railroad runs parallel to the northern foothills of the Greater Caucasus and along the Caspian Sea to Baku. A line branching off at Armavir reaches the Black Sea oil port of Tuapse and continues along the coast past Sochi to the Georgian SSR through a rail link completed during the Second World War. Transportation across the Greater Caucasus range is maintained by three important highways: the Sukhumi military road (Cherkessk-Sukhumi), the Ossetian military road (Alagir-Kutaisi), and the Georgian military road (Dzaudzhikau-Tbilisi).

## Rostov Oblast

Capital, Rostov on the Don; Area, 40,300, population, 2,550,000

Rostov Oblast is astride of the lower Don River, within the bend of the river in proximity to the Volga near Stalingrad. The southern section of the oblast is drained mainly by the Sal and the Manych, two left affluents of the Don. According to its relief, the region may be divided into the eastern end of the Donets ridge, the southeastern outliers of the Central Russian upland in the north and the wide Don steppe in the south.

23: Shabad N-4 (no date) 1951 R1 Soviet Union R1
Caucasia RH1



in a southwestern suburb of Krasnyy Sulin. The former plays an important role in the mechanization of the coal-mining operations. Before the Second World War, more than 10 percent of the Donbas coal was mined within Rostov Oblast.

On the basis of the coal resources, heavy industry is operating metallurgical plants at Taganrog and Krasnyy Sulin. Rostov is the home of *Rossel'mash*, the largest agricultural machinery plant of the USSR. Agricultural implements are also manufactured at Morozovsk. Other centers engaged in the production of machinery and metal products are Taganrog, Novocherkassk, Glubokiy, and Likhovskoy (at Likhaya station).

In the northern grain-growing district, wheat and sunflower are the dominant crops. Toward the southeast, barley and mustard become important; further on, toward the Caspian Lowland, the emphasis shifts to stock raising. Horses and meat cattle are gradually replaced by sheep in the drier areas. Cotton is grown to some extent in the south and the southeast. Several Cossack villages along the Don River, notably Tsimlyanskaya and Razdorskaya, have extensive vineyards. In a wide zone through the urban and heavily industrialized section of Taganrog-Rostov-Shakhty, truck gardening and the raising of dairy cattle are the principal agricultural activities. The principal agricultural centers are Millerovo and Chertkovo in the north and Sal'sk (with near-by Gigant state farm, one of the largest grain farms of the USSR) in the southeast. These and other towns throughout the oblast mill flour, extract sunflower oil, and process tobacco. The fish catch of the Don delta and adjacent Taganrog Gulf is processed at Azov, a small port southwest of Rostov.

Rostov Oblast is settled by Russians and a Ukrainian minority. Prior to the Second World War some Kalmyk elements were organized into a Kalmyk national rayon, northwest of Zimovniki. In 1944, following the abrogation of the Kalmyk Autonomous SSR, the rayon was also abrogated, and presumably the population was resettled elsewhere. In this connection, Rostov Oblast also acquired the westernmost section of the former Kalmyk Autonomous SSR.

Rostov lies on the elevated, right bank of the Don River at the head of the delta. Thanks to its favorable location at the junction of trade routes between the Black Sea, the Volga, the Ukraine, the European Center, and the Northern Caucasus, it developed early into an important commercial center and transportation hub. With the construction of the

23: Shabad N-4 (no date) 1951 Rl Soviet Union Rl
Caucasia RH1



*Rossel'mash* agricultural machinery works, the city became an industrial center of first rank. It is the site of an auto-assembly plant, airplane factory, shipyards and machine-tool works, and produces a wide range of products, including foods (flour, vegetable oil, meat, canned goods), paints, cement, glass, shoes, furniture, and cigarettes. The city suffered considerably during the Second World War. Across the Don River lies Bataysk, a rail junction and aircraft center with two large airfields and repair shops. Northeast of Rostov, on the Aksay, a branch of the Don, lies the former center of the Don Cossacks, Novocherkassk, at present a machine-manufacturing city, with locomotive works.

Taganrog, the second city of the oblast, is a major coal and grain-shipping port on the Sea of Azov. A foremost industrial center, it has metallurgical and pipe-rolling mills, one of the largest boiler works of the USSR, and produces machines for the food and chemical industries. It manufactures agricultural implements, instruments, and shoes, and has an extensive food-processing industry. Shipbuilding and aircraft manufacturing are also important.

Kamensk-Shakhtinskiy, on the Northern Donets River and the Voronezh-Rostov railroad, has chemical works and lumber mills and produces flour and alcohol.

Shakhty (formerly called Aleksandrovsk-Grushevskiy) is the largest coal-mining center in this section of the Donets Basin. It has a 90,000 kw. power station in its eastern suburb of Artemovskiy, textile, leather and food industries. Its southern suburb, Kamenolomni, has stone quarries (for which it is named) and metalworks. Another coal-mining center, Novoshakhtinsk (until 1939, Komintern), lies west of Shakhty.

## Krasnodar Kray

**Capital, Krasnodar; area, 82,800, population, 3,000,000**

Krasnodar Kray occupies the western section of the Northern Caucasus adjoining the Sea of Azov and includes a short section of Transcaucasia along the Black Sea littoral. The presence within a relatively restricted area of maritime and high-altitude influences bring about a great variety of natural conditions and economic activities. Thus, the forested slopes of the Greater Caucasus are in sharp contrast to the treeless level steppes beyond the Kuban' River, and the subtropical Black Sea coast, protected from the northerly winter winds, is opposed to the continental climate of the remainder of the region.

The entire kray, with the exception of the mountains in the south and

23: Shabad N-4 (no date) 1951 R1 Soviet Union R1
Caucasia RH1



Sal steppes, where because of the dry conditions only sheep and horses can be successfully reared.

The rich agricultural production of the Kuban' lowlands is processed at a number of centers, chiefly Krasnodar, Armavir, Kropotkin, and Labinsk. Of great importance are oil presses, canneries, flour mills, and tobacco factories.

The Black Sea littoral is characterized by a humid, maritime climate, luxuriant natural vegetation, mineral springs, and a picturesque location between the mountains and the sea. These factors combine to make the area provide garden crops and health resorts. Because of the limited land area under cultivation and the presence of resorts (Sochi, Matsesta, and Anapa), the growing of vegetables, fruits, vineyards, and dairy farming receive priority. Tobacco, southern hemp, oil-bearing plants are also cultivated. Flower gardens and decorative plants are common. Wine is made chiefly at Anapa, at Abrau-Dyurso near Novorossiysk, and at Solntsedar [gift of the sun], just west of Gelendzhik. Gelendzhik itself is an important dairying center. Tea is processed at Dagomys, northwest of Sochi.

The Kuban'-Black Sea petroleum region (near Maykop) is centered in Neftegorsk [oil mountain] and Apsheronsk (named for the oil-rich Apsheron peninsula). Near by are the oil towns of Khadyzhenskiy and recently-opened Kutais. Another field has been developed at Il'skiy, southwest of Krasnodar. Prior to the Second World War this region was one of the most rapidly developing petroleum areas of the USSR; it had a tenfold increase in production under the Soviet regime. Destruction caused by the war has, however, been responsible for a considerable setback in output.

The basic transportation routes are the Rostov-Baku and Novorossiysk-Stalingrad railroads, their junction being at Tikhoretsk, a major rail center with extensive yards and shops. Short branch lines serve most sections of the region. During the Second World War the opening of the Black Sea littoral railroad between Adler and Sukhumi (Georgian SSR) established another vital link across the Greater Caucasus to the Transcaucasian republics. Coastal steamers serve the Black Sea shore, stopping at Sochi, Tuapse, and Novorossiysk, the most important ports.

Krasnodar, formerly called Yekaterinodar, lies on the right bank of the Kuban', in the middle of the fertile black-earth agricultural area. Once the capital of the Kuban' Cossacks, it has oil-refining and metal-working industries. It is a major food-processing and rail center, having

23: Shabad N-4 (no date) 1951 Rl Soviet Union Rl
Caucasia RH1
Adige RH4



dairying, tobacco, distilling, canning, flour, and meat-packing plants. Steel tubing and telephone equipment are also manufactured. Surrounding the city are some of the principal jute-producing lands of the USSR.

Novorossiysk is a well-equipped Black Sea port on Tsemes Bay and the principal cement-milling center of the USSR. It ships the wheat of the Kuban' area and lies amidst such well-known resorts as Anapa, to the northwest, and Kabardinka and Gelendzhik, to the southeast. West of the city is the famous champagne center of Abrau-Dyurso. Novorossiysk produces agricultural machinery, bicycles, furniture, textiles, and flour. Grain elevators and oil tanks lie in the harbor area. The cement mills ("Krasnyy Oktyabr'" and "Krasnyy Proletariy") lie in the suburb Standart, north of the Tsemes Bay. Other mills lie in the towns of Verkhne-Bakanskaya and Gayduk, northwest of Novorossiysk.

Tuapse, another major port on the Black Sea, rivals Batumi in the shipping and refining of petroleum. Surrounded by orchards and vineyards, it is the terminus of an oil pipe line from Groznyy and Neftegorsk. It produces large amounts of fuel oil, which serves as the principal power source for electric stations throughout the region. Shipbuilding and the manufacture of machines for the petroleum industry are also important.

Sochi is the most popular health resort on the Black Sea coast. It is the site of numerous sanitariums and an experimental station for subtropical agriculture. To the southeast lie the satellite resorts of Matsesta (sulphur springs) and Khosta. It became a city of republic rank in 1948.

Other important centers of Krasnodar Kray are Armavir, with food (meat, flour, sunflower oil) and agricultural machinery industries, Yeysk, a fishing port having canning and meat-packing plants, and Kropotkin (food products).

Adyge Autonomous Oblast (capital, Maykop; area, 1,700, population, 300,000) is located on the middle Kuban' River, between its left affluents, the Laba and the Belaya. It was formed in 1922 and is one of the few remaining settlement areas of the Cherkess, or Circassian, ethnic group. The population, which is about 45 percent Cherkess or Adyge (the designation applied by the people to themselves), is for the remainder evenly divided among the Russian and the Ukrainian groups. The rural economy rests chiefly on the cultivation of winter wheat, sunflowers, and tobacco. Horse breeding is also engaged in.

Maykop, on the Belaya River, at the north foot of the Caucasus, is

23: Shabad N-4 (no date) 1951 R1 Soviet Union R1
Caucasia RH1



SU 631 928 C 631 728 persed and resettled, and the Karachay lost official recognition. The autonomous unit was abolished. Its major portion, including the capital, Mikoyan-Shakhar, now Klukhori, and the resort Teberda, and the village Uchkulan, now Madniskhevi, were ceded to the Georgian SSR, the strip along the upper Laba River passed to Krasnodar Kray; another portion, including the village Pregradnaya, was annexed to Cherkess Autonomous Oblast; the remainder became part of Stavropol' Kray proper.

SU 241 C 241 The climatic and soil conditions of the region are favorable to the development of grain farming and the raising of livestock for wool and meat, activities which prevail for similar reasons in the dry steppes of the Lower Volga Region, in northern Kazakhstan, and in Western Siberia. The main crops are winter wheat, sunflowers in the west, and cotton in the east. In the section bordering on the upper and middle Kuma River, irrigated farming is devoted to the raising of orchards, garden crops, and vineyards, the latter particularly in the Budennovsk–Georgiyevsk area. With the construction of the Nevinnomyssk Canal, to be completed during the current Five-Year Plan, the glacier-fed Kuban' River will be linked with the Yegorlyk, an affluent of the Manych, and new areas will be put under irrigation in the western part of Stavropol' Kray. Truck produce is grown intensively in the relatively urban areas of the health resorts (Pyatigorsk, Kislovodsk, and others) in the south and in the southwestern mountain area garden and dairy farming is carried on. In the northern and eastern steppes the raising of sheep is most important. On specially organized state farms two major breeds predominate: the merino sheep for the production of fine wool and the *volosh* sheep, which furnishes meat and coarse wool. The Alpine pastures in the southwest support the so-called Karachay sheep, which also is used mainly for meat. Dairy cattle are raised in the health resort district, and hogs and horses on the mountains slopes.

SU 236 C 236

SU [135] C [135] SU 438* C ●438 The mineral resources of the region consist only of coal, which is worked in small amounts at Khumarinskoye and Ordzhonikidzevskiy, just north of Klukhori, of raw material for the chemical industry of Cherkess Autonomous Oblast, and of the mineral springs in the Pyatigorsk-Kislovodsk area. The products of agriculture and of the pastoral economy are partly processed within the region; some are exported in semi-processed form to other areas of the USSR. The principal export items are grain, vegetable oil, meat, tallow, dairy products, raw wool, fruits, and vegetables. The local industries are scattered

23: Shabad N-4 (no date) 1951 R1 Soviet Union R1
Caucasia RH1



throughout the region and are especially concentrated at Stavropol', Georgiyevsk, Nevinnomyssk, and Budennovsk, where flour milling, oil pressing, canning, dairying, wool washing, cotton ginning, and wine making are the principal activities.

Of special importance in the economy of the region are the health and tourist resorts. One of the most important resort areas of the USSR lies in the foothills of the Greater Caucasus. There the resort cities of Zheleznovodsk (ferruginous springs), Pyatigorsk, Yessentuki, and Kislovodsk are linked by an electrified branch with the main Rostov-Baku railroad at Mineral'nyye Vody. The bottling of mineral waters is a major export industry.

For communications the region relies chiefly on the Rostov-Baku trunk line, from which branches penetrate into the remote sections to Divnoye, Blagodarnoye, Budennovsk, and into the foothills of the Caucasus to Ust'-Dzhegutinskaya and Kislovodsk. The Sukhumi military road, one of the three pass roads through the mountains, continues from the Nevinnomyssk-Cherkessk-Ust'-Dzhegutinskaya rail branch through the valley of the Kuban' and the Teberda rivers, and enters the territory of the Georgian SSR at Klukhori. Of extreme importance for the future development of the region will be the final realization of the Manych Canal project linking the Caspian and the Black seas. Prior to the Second World War, the waterway had been canalized for a distance of over 150 miles eastward to the area of Divnoye. Due to destruction caused by the war, several reservoirs were emptied, and the canal installations fell into disuse. Small-scale reconstruction has been undertaken since the war; however, the completion of the project will have to await a future Plan.

Stavropol', the center of the kray, was known as Voroshilovsk from c. 1935 until 1943. It lies in the chief grain area of the region and has flour mills, a meat-packing plant, wool and leather industries, and produces chemicals and lumbering machinery. The vicinity of the city will benefit immeasurably from the new Nevinnomyssk Canal which will provide irrigation to this drought-ridden section.

Pyatigorsk, in the midst of five mountains (whence its name), of which the Besh-Tau and the Mashuk are best known, is the center of the four resort cities of the Northern Caucasus. Its warm sulphur springs and mud baths are much frequented. Next in size is Kislovodsk, at an elevation of 2,695 feet, with carbonated springs. Yessentuki, west of Pyatigorsk, has salt and alkaline springs, and Zheleznovodsk, to the

23: Shabad N-4 (no date) 1951 Rl Soviet Union Rl
Caucasia RH1
Cherkess RH5
Kabardin RH6



north, ferruginous springs. In addition to their importance as health resorts, these four cities are centers of light industry, producing radio apparatus (Pyatigorsk), bottled mineral water (Yessentuki), and food products.

THE CHERKESS AUTONOMOUS OBLAST (capital, Cherkessk; area, 1,540; population, 100,000) lies along the upper Kuban' River and extends southwestward to the Urup, an affluent of the Kuban'. It was formed in 1926 as a national okrug, following the dissolution of the Karachay-Cherkess Autonomous Oblast (formed originally in 1922), and reached the status of autonomous oblast in 1928. Its population includes several related elements of the Cherkess, or Circassian, ethnic group, including the Kabardinians (who comprise one third of the total population), the Abaza (30 percent), and the Adyge branch of the Cherkess (7 percent). There are also Nogay Tatars (over 15 percent), Russians, and Ukrainians.

In the northern steppe the economy is based on grain farming, and in the southern foothills on livestock raising. Lumbering is carried on in the mountains in the south. Most of the industry is concentrated in the capital, Cherkessk.

Cherkessk was formerly known as Batalpashinsk; during the late 1930's it was called briefly Sulimov, and, after 1937, Yezhovo-Cherkessk, until the purge of Yezhov, in 1939. It has motor repair shops and chemical works (ammonium sulphate), and produces shoes, furniture, and clothing.

## Kabardinian Autonomous Soviet Socialist Republic

Capital, Nal'chik; area, 4,600, population, 300,000

The Kabardinian Autonomous SSR includes the basins of the left affluents of the Terek River, notably the Malka and its branch, the Baksan, and extends from the upper courses of these mountain torrents to the Terek proper in the area where it makes its sharp turn toward the east. From the standpoint of physical geography, the republic includes three separate sections. In the south lies the highest part of the Greater Caucasus, with its glaciated peaks extending eastward from the area of Mount El'brus and including the peaks of Dykh-Tau, Koshtan-Tau, and Shchara, an unsettled, roadless mountain wilderness. The central portion comprises the slopes of the Caucasus, where the population is concentrated in the narrow gorges of the mountain streams flowing to the

Until 1936 Transcaucasia formed a single political unit: the Transcaucasian Soviet Federated Socialist Republic, then one of the union republics of the USSR. With the promulgation of the 1936 Constitution, this federated republic was split up into its primary components based on the three principal nationalities: Armenian, Azerbaijan, and Georgian SSR's. Minor nationalities, such as Abkhaz, Adzhars, and Ossetians, are organized into lesser autonomous units such as autonomous SSR's or autonomous oblasts.

Petroleum is the most important single asset of Transcaucasia. The Baku oil region of world-wide significance is the principal petroleum producer of the USSR, furnishing more than one half the total output. Pipe lines for crude oil, kerosene, and other petroleum products lead from Baku across the entire region to Batumi on the Black Sea, next to Baku, the principal oil port and refining center of Transcaucasia. Before the Second World War the petroleum industry accounted for two fifths of all factory workers, two thirds of the use of electric energy, more than one half the industrial production, and almost two thirds of the exports of Transcaucasia. Since then, however, the creation of new industries and the increase of electric power sources have reduced the relative importance of this branch of the economy. Among the other important power resources are the coal mines of Tkibuli and Tkvarcheli in Georgia, especially the reserves of hydroelectric power, which equal the reserves of the European part of the USSR. Among the most important metal deposits are the manganese mines of Chiatura (Georgia), the second largest in the world, copper in Armenia, and iron in Azerbaijan.

Manufacturing industries are mainly devoted to the processing of the local agricultural products: fruit canning, wine-making, distilling, and cotton ginning. Azerbaijan has a well-developed textile industry, and many of the precious woods are used in wood-working plants. Heavy metallurgy is represented by the steel mills of Rustavi (Georgia) and the ferro-manganese works of Zestafoni (Georgia), and there are machinery plants in many of the large cities. Chemicals and cement are also produced.

In connection with the varied natural conditions and under the influence of the vertical zoning in the mountains, all rural economy forms are represented—from orchard farming in the irrigated sections to nomadic livestock raising in the drier areas. The land is divided according to usability as follows: one fifth is arid, due to the presence of rocks, sands, or marshes; another fifth is forested; more than one third is